

2444

**ENGINEERED WASTE MANAGEMENT FACILITY
SAMPLING AND ANALYSIS PLAN**

10/23/91

**USEPA/DOE-FO
1
LETTER**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

ORIGINAL FILE COPY

2444

OCT 23 1991

REPLY TO ATTENTION OF:

Mr. Jack R. Craig
United States Department of Energy
Feed Materials Production Center
P.O. Box 398705
Cincinnati, Ohio 45239-8705

5HR-12

RE: Engineered Waste Management
Facility Sampling and Analysis
Plan

Dear Mr. Craig:

The United States Environmental Protection Agency (U.S. EPA) has completed its review of the Engineered Waste Management Facility Sampling and Analysis Plan.

U.S. EPA hereby approves the Work Plan pending incorporation of the enclosed comments.

Please contact me at (312/FTS) 886-0992 if you have any questions.

Sincerely,

James A. Saric
Remedial Project Manager

Enclosure

cc: Graham Mitchell, OEPA-SWDO
Pat Whitfield, U.S. DOE-HDQ

(allen)
partial
action
response
to u-2203
(3380)

Date Rec'd OCT 28 1991
Log E-0377
File 6416.8
Library _____

ATTACHMENT

ENGINEERED WASTE MANAGEMENT FACILITY
SAMPLING AND ANALYSIS PLAN
REVIEW COMMENTS

GENERAL COMMENTS

1. The SAP describes various programmatic needs and data analysis required, but no specific remedial actions. The SAP should include the remedial actions contemplated, which may help identify additional, action-specific data needs.
2. An overall sampling matrix should be included to identify the number of sampling locations, samples, and analyses. Presently, these items are covered separately under each programmatic group, causing confusion.
3. Tables 1 through 6 contain duplicate and overlapping information. For example the Data Quality Objectives (DQO) for Geologic and Hydrogeologic Table 1 includes radiological, chemical, geochemical, and geotechnical analyses. Similarly, the DQO for Geotechnical Table 2 includes radiological, chemical, geochemical, geologic and hydrogeologic analyses. Additionally, radiological, chemical and geochemical analyses are included in Tables 3, 4 and 5 respectively. This duplication creates considerable confusion.
4. The heading "Critical Samples" in Tables 1 through 6 should be changed to "Number of Samples" because none of the samples is identified as being critical; only the total number of samples is identified.

SPECIFIC COMMENTS

5. Section 2.1, Page 1, Line 15: This sentence should be clarified. It seems to imply that very few monitoring wells exist because of "the need to determine the nature and extent of contamination ---."
6. Section 2.4, Page 3, Line 30: The following sentence should be clarified: "The securing of radiological and chemical samples allows maximum use of the time, resources, and logistics involved in the installation of the geotechnical borings and monitoring wells." The samples are to be collected during installation of borings and wells.
7. Section 3, Tables 1 and 2: The "Critical samples" heading is inaccurate and should be revised. See general comment no. 4.
8. Section 3, Table 2: The latest ASTM test designation numbers should be used for water content determination and one-dimensional consolidation tests.
9. Section 3, Table 2: For permeability testing, the test to be used for a given type of soil should be identified.
10. Section 3, Table 2: Standard Proctor or Modified Proctor test should be included to determine the moisture and density relationship for any kind of soil.
11. Section 3.3, Page 10, Line 3: A total of 33 samples are needed for soil characterization, but only 29 samples are identified in Table 3. This discrepancy should be resolved.

12. Section 3.5, Page 20, Line 23: This sentence should be clarified. It seems to imply that accumulation of radionuclides by trees is beneficial to animals and plants and that removal of trees could pose a risk to animals and plants.
13. Section 4, Table 8: It should be explained how the number of tests are arrived at. There are two Shelby tube samples for each of the 18 boreholes, making a total of 36 soil samples; however, number of tests for each specific kind of test varies between 10 and 100.
14. Section 4.3.2, Page 11: This section should identify the leach tests included in Section 3, Table 3, and Appendix A.